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Natural Resources
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2014 Annual Water Use Audit Form (LMO-2)

This form must be completed by all Category IA and IIB Permittees for each annual water use accounting year running from October 1, 2013 through September 30, 2014. This form must be submitte to the Department by January 5, 2015.

Section I - General Information

Name, address and phone number of Permittee:

_____
_____
_____
_____
_____

County: _____

Name, address and phone number of the contact person for the Permittee:

_____
_____
_____
_____
_____

e-mail address _____

Authorized Official _____

Title: _____
Date: _____

Please provide leak survey information and population estimates for the last year.

Population: _____ **Number of existing households:** _____

The Illinois Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under Chapter 19, Section 120.2 of the Illinois Revised Statutes. Disclosure of this information is required. Failure to provide any information will result in this form not being processed. This form has been approved by the Forms Management Center, CMS.

Section II - Water Use Audit

Enter the amount of water pumped and utilized for each item shown below. All amounts entered in this section must be in units of million gallons per day (mgd) rounded off to three decimal places. Conversion calculations are provided for your use in Section IV.

A. Pumpage Data

Water bought or received from the following distribution systems:

1. Lake Michigan Pumpage		**mgd**
2. Shallow Aquifer Pumpage		**mgd**
3. Deep Aquifer Pumpage		**mgd**
4. Total Pumpage (add lines 1, 2 & 3)		**mgd**
5. Water Treatment Use		**mgd**
6. Gross Annual Pumpage (subtract line 5 from line 4)		**mgd**

Water sold or provided to any other distribution systems (enter the name of each system and the amount sold or provided to that system on lines 7 through 12). If additional lines are required, attach an additional sheet listing each system and amount.

7		**mgd**
8		**mgd**
9		**mgd**
10		**mgd**
11		**mgd**
12		**mgd**
13. Total (add lines 7-12 and any additional amounts)		**mgd**
14. Net Annual Pumpage (subtract line 13 from line 6)		**mgd**

B. Uses	**Metered**	**Unmetered**	**Total**	
15. Residential				**mgd**
16. Commercial and Manufacturing				**mgd**
17. Municipal				**mgd**
18. Construction				**mgd**
19. Total Uses (add Total lines 15 through 18)				**mgd**
20. Percentage of Total Use to Net Annual Pumpage (divide line 19 by line 14 and multiply by 100)				**%**

C. Hydrant Uses

21. Firefighting and Training		**mgd**
22. Water Main Flushing		**mgd**
23. Sewer Cleaning		**mgd**
24. Street Cleaning		**mgd**
25. Construction		**mgd**
26. Other (attach explanation)		**mgd**
27. Total Hydrant Use (add lines 21 through 26)		**mgd**

Section II - Water Use Audit (continued)

28. Percentage of Hydrant Use to Net Annual Pumpage (divide line 27 by line 14 and multiply by 100) _____ %
29. Department allowed maximum for Hydrant Use 1.0 %
30. Excessive hydrant use (subtract line 29 from line 28). If the percentage is greater than 0.0, attach an explanation. [see Rule 730.307 (e)] _____ %

D. Unavoidable Leakage and Unaccounted for Flow

31. Maximum Unavoidable Leakage (Do worksheet in Section III; enter amount from line 10 of the worksheet) _____ mgd
32. Percentage of Maximum Unavoidable Leakage to Net Annual Pumpage (divide line 31 by line 14 and multiply by 100) _____ %
33. Total Accounted for Flow (add lines 19, 27 and 31) _____ mgd
34. Percentage of Total Accounted for Flow to Net Annual Pumpage (divide line 33 by line 14 and multiply by 100) _____ %
35. Total Unaccounted for Flow (subtract amount on line 33 from line 14) _____ mgd
36. Percentage of Total Unaccounted for Flow to Net Annual Pumpage (divide line 35 by line 14 and multiply by 100) _____ %
37. Total Unaccounted for Flow and Maximum Unavoidable Leakage (add lines 31 and 35 and multiply by 365,000,000) _____ gal/yr
38. Wholesale Water Rate (the rate payed by the permittee to purchace Lake Michigan in $/1,000 gallons) _____ $/1,000 gal
39. Wholesale Value of Water Lost for Water Year 2013 (multiply lines 37, 38 and divide by 1,000) _____ $/yr

Section III - Maximum Unavoidable Leakage Worksheet

Complete the following calculations to determine your maximum unavoidable leakage. Enter the appropriate amounts in the space provided.

A. Cast Iron Pipes With Lead Joints

Age of Pipes	Miles of Pipe	Leakage Rate	Maximum Unavoidable Leakage	
1. 60 yrs. or greater		x 3,000 g/d/mi =		g/d
2. 40-60 yrs.		x 2,500 g/d/mi =		g/d
3. 20-40 yrs.		x 2,000 g/d/mi =		g/d
4. 20 yrs. or less		x 1,500 g/d/mi =		g/d

B. All Other Types of Pipes and Joints

Age of Pipes	Miles of Pipe	Leakage Rate	Maximum Unavoidable Leakage	
5. 60 yrs. or greater		x 2,500 g/d/mi =		g/d
6. 40-60 yrs.		x 2,000 g/d/mi =		g/d
7. 20-40 yrs.		x 1,500 g/d/mi =		g/d
8. 20 yrs. or less		x 1,000 g/d/mi =		g/d
9. Total Miles		Total Leakage		g/d

10. Total Maximum Unavoidable Leakage, in mgd (divide total leakage on line 9 by 1,000,000) _____ mgd
(Enter this amount on line 31 of "Section II - Water Use Audit)

Section IV - Conversion Table

Below are conversion calculations to convert the most commonly used units to units of million gallons per day (mgd).

To convert cubic feet per year (cf) to (mgd) use:
(cf x 7.48)/1,000,000/365 = mgd

To convert gallons per year (g) to (mgd) use:
g/1,000,000/365

To convert gallons per day (g/d) to (mgd) use:
(g/d)/1,000,000

To convert million gallons per year (mg) to (mgd) use:
mg/365 = mgd

ed